PEAK ANALYZING METHOD AND WAVEFORM PROCESSING DEVICE

ABSTRACT

The present disclosure provides a peak analyzing method for separating overlapping peaks observed in a second signal waveform representing a relationship between a second parameter and a signal intensity into a plurality of individual peaks originating from different factors based on signal patterns observed in a dimension of a first parameter, the method comprising at least: performing singular value decomposition on an input matrix expressing three-dimensional data to be processed; estimating characteristic orientations within a space spanned by a plurality of basis vectors by performing a geometric analysis on a trajectory defined by a plurality of weighting vectors in an SVD projection space whose number of dimensions is equal to a lowered rank given by a singular value decomposition process; and deconvoluting signal waveforms in a first matrix of a dimension of the first parameter by a transformation matrix.

[Fig. 2]